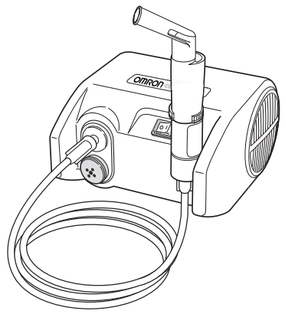
OMRON



COMP A-I-R

Compressor Nebulizer
Model NE-C25S

Instruction Manual

EN

All for Healthcare

NE-C25S-USER MANUAL-REV.00 MARCH 2014- COD ()

Intended use

Medical Purpose
This product is intended to be used for inhaling medication for respiratory disorders.

Intended User
- Legally certified medical experts, such as doctor, nurse and therapist.
- Caregiver or patient under the guidance of qualified medical experts for home treatment.
- The user should also be capable of understanding general operation of NE-C25S and the content of instruction manual.

Intended Patients
This product should not be used on patients, who are unconscious or are not breathing spontaneously.

Environment
This product is intended for use in a medical facility, such as Hospital, clinic and doctor's office, and in a room of general household.

Durable period

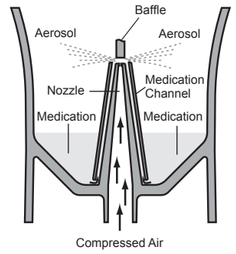
The nebulizer kit must be replaced after a long period of inactivity, in case it shows deformations or breakings, or when the medication tank nozzle is obstructed by dry medicine, dust, etc. We recommend to replace the nebulizer kit after a period between 6 months and 1 year depending on the usage.
In normal usage conditions, the air filter must be replaced approximately after 500 working hours or after each year. We recommend to periodically check the air filter (10 - 12 treatments) and, if the filter shows a grey or brown colour or is wet, replace it.

Precautions for use
Warnings and cautions described in the instruction manual should be observed.

Thank you for purchasing Omron Compressor Nebulizer NE-C25S.
This product was developed in conjunction with respiratory therapists for the successful treatment of asthma, chronic bronchitis, allergies and other respiratory disorders.
This is a medical device. Operate the device only as instructed by your doctor and/or respiratory therapist.

How the nebulizer kit works

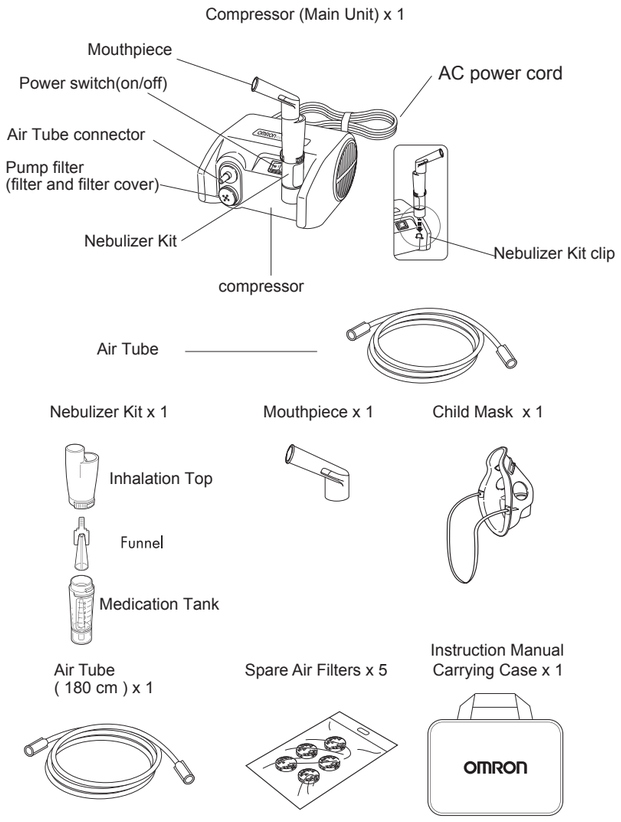
The medication that is pumped up through the medication channel is mixed with compressed air which is generated by a compressor pump. The compressed air mixed with medication is turned into fine particles and sprayed when in contact with the baffle.



Manufacturer	**Medel Group S.p.A.** S. Polo di Torrile (PR) - Italy
Distributor	**OMRON HEALTHCARE SINGAPORE PTE LTD.** 438A Alexandra Road, #05-05/08 Alexandra Technopark, Singapore 119967 www.omronhealthcare-ap.com

Made in China

Know your unit



Important safety instructions

Read all the information in the instruction manual and any other literature included in the box before using the device.

⚠ Warning: Indicates a potentially hazardous situation which, if not avoided, could result in serious injury.

(Usage)
- For type, dose, and regime of medication follow the instructions of your doctor or respiratory therapist.
- If you feel anything unusual during use, stop using the device immediately and consult your doctor.
- Do not use only water in the nebulizer for inhaling purposes.
- Keep the device out of reach from unsupervised infants and children. The device may contain small pieces that can be swallowed.
- Do not store the air tube while there is moisture or medication remaining inside.
- Do not use or store the device where it may be exposed to noxious fumes or volatile substances.
- Do not use the device where it may be exposed to flammable gas.
- Do not cover the compressor with a blanket, towel, or any other type of cover during use.
- Always dispose of any remaining medication after use, and use fresh medication each time.
- Do not use in anaesthetic or ventilator breathing circuits.
- Do not block the ventilation slots. Never place the device where the ventilation slots may be obstructed during operation.
- Store the parts in a clean location for avoiding infection.

(Risk of electrical shock)
- Never plug or unplug the device with wet hands.
- The compressor and power cord are not waterproof. Do not spill water or other liquids on these parts. If liquid does spill on these parts, immediately unplug the power cord and wipe off the liquid with gauze or other absorbent material.
- Do not immerse the compressor in water or other liquid.
- Do not use or store the device in humid locations.
- Do not operate the device with a damaged power cord or plug.
- Keep the power cord away from heated surfaces.

(Cleaning and disinfecting)

Observe the rules below when cleaning or disinfecting parts. Failure to observe these rules may result in damage, inefficient nebulization or infection. For the instructions, refer to "Cleaning and disinfecting" section.
- Clean and disinfect the nebulizer kit, mask, mouthpiece before using them when as follows:
  - the first time after purchase.
  - if the device has not been used for a long period of time
  - if more than one person uses the same device
- Be sure to wash or wipe the parts after use, and ensure that they are thoroughly disinfected and dried, and stored in a clean location.
- Do not leave the cleaning solution in the parts.

⚠ Caution: Indicates a potentially hazardous situation which if not avoided, may result in minor or moderate injury, or physical damage.

(Usage)
- Provide close supervision when this device is used by, on, or near children or invalids.
- Make sure that the parts are attached correctly.
- Make sure that the air filter is correctly attached.
- Make sure that the air filter is clean.

- Do not tilt the nebulizer kit at an angle of greater than 45 degrees in all directions or shake it while in use.
- Do not use or store the device while the air tube is creased.
- Use only original nebulizing parts, air tube, air filter and air filter cover.
- Do not add more than 6 ml of medication to the medication tank.
- Do not carry or leave the nebulizer kit while the medication tank contains medication.
- Do not leave the device unattended with infants or persons who cannot express their consent.
- Do not subject the device or the parts to any strong shocks such as dropping the device on the floor.
- Do not jab the nozzle of the medication tank with a pin or any sharp object.
- Do not insert fingers or objects inside the compressor.
- Do not disassemble or attempt to repair the compressor or power cord.
- Do not leave the device or its parts in extreme hot or cold temperature, or under direct sunlight.
- Do not block the air filter cover.
- Do not use the device while sleeping or if drowsy.
- Approved for human use only.
- When using the device, the main unit may become hot.
- Do not touch the main unit for other than necessary operation such as turning off the power while nebulizing.
- To avoid the medication residue on the face, be sure to wipe the face after removing the mask.
- Do not use a damaged nebulizer kit, mouthpiece.

(Risk of electrical shock)
- Always unplug the device from the power outlet after use and before cleaning.
- Plug the device into the appropriate voltage outlet. Do not overload power outlets or use extension cords.
- Do not misuse the power cord.
- Do not wind the power cord around the compressor.
- Changes or modifications not approved by OMRON HEALTHCARE will void the user warranty.
- Do not pull the power cord strongly.

(Cleaning and disinfecting)

Observe the rules below when cleaning or disinfecting parts. Failure to observe these rules may result in damage, inefficient nebulization or infection. For the instructions, refer to "Cleaning and disinfecting" section.
- Do not use a microwave oven, dish dryer or hair dryer to dry the device or the parts.
- Do not use an autoclave, EOG gas sterilizer or low temperature plasma sterilizer.
- When disinfecting parts by boiling, make sure that the container does not boil dry. Otherwise it may also result in fire.

General Safety Precautions:
- Inspect the device and parts before using them each time, and check that there are no problems. In particular, be sure to check the following:
  - That the nozzle or air tube are not damaged.
  - That the nozzle is not blocked.
  - That the compressor operates normally.
- When using this device, there will be some noise and vibration caused by the pump in the compressor. There will also be some noise caused by the emission of compressed air from the nebulizer kit. This is normal and does not indicate a malfunction.
- Operate the device only as intended. Do not use the device for any other purpose.
- Do not use the device at temperatures greater than +40°C.
- Make sure that the air tube is securely attached to the compressor and nebulizer kit, and does not come loose. Twist the air tube plug slightly when inserting it into the air tube connectors to avoid the air tube disconnecting during use.
- To completely isolate the device from the power source unplug the plug from the power source.

Keep these instructions for future reference.

Important information regarding Electro Magnetic Compatibility (EMC)

With the increased number of electronic devices such as PC's and mobile (cellular) telephones, medical devices in use may be susceptible to electromagnetic interference from other devices. Electromagnetic interference may result in incorrect operation of the medical device and create a potentially unsafe situation.

Medical devices should also not interfere with other devices.

In order to regulate the requirements for EMC (Electro Magnetic Compatibility) with the aim to prevent unsafe product situations, the EN60601-1-2:2007 standard has been implemented. This standard defines the levels of immunity to electromagnetic interferences as well as maximum levels of electromagnetic emissions for medical devices.

This medical device conforms to this EN60601-1-2:2007 standard for both immunity and emissions.

Nevertheless, special precautions need to be observed:
- Do not use mobile (cellular) telephones and other devices, which generate strong electrical or electromagnetic fields, near the medical device. This may result in incorrect operation of the unit and create a potentially unsafe situation. Recommendation is to keep a minimum distance of 7 m. Verify correct operation of the device in case the distance is shorter.

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

This marking shown on the product or its literature, indicates that it should not be disposed of, with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this product from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.
Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can return this item for environmentally safe recycling.
Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Optional Accessories

Name	Model
Nebulizer Kit	NEB-NK-25IN
Adult Mask	NEB-MSLP-25IN
Child Mask	NEB-MSMP-25IN
Mouthpiece	NEB-MP-25IN
Air Tube (approx. 180 cm)	NEB-TP-25IN
Spare Air Filters (Package of 5)	NEB-AFR-25IN

How to use

⚠ **Warning:**
Clean and disinfect the nebulizer kit, mask or mouthpiece before using them when as follows:
- the first time after purchase.
- if the device has not been used for a long period of time
- if more than one person uses the same device

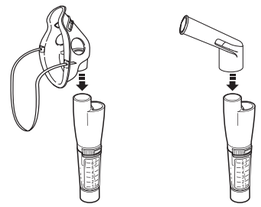
For the instructions, refer to “Cleaning and disinfecting” section.

1. Make sure that the power switch is in the off (○) position.
2. Plug the power plug into a power outlet.
3. Remove the inhalation top from the medication tank.

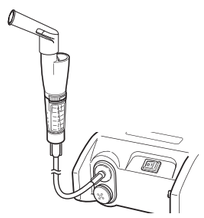
4. Add the correct amount of prescribed medication to the medication tank.Make sure that the funnel is properly fitted on the nozzle inside the nebulizer.

5. Put the inhalation top back inside the medication tank.

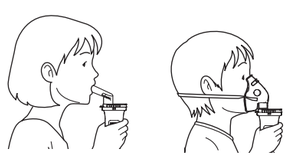
6. Attach the mask or mouthpiece to the nebulizer kit tightly.



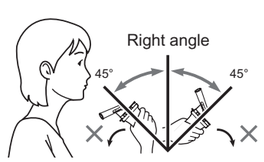
7. Attach the air tube.
   Twist the air tube plug slightly and push it firmly into the air tube connector.



8. Hold the nebulizer kit as indicated on the right.
   Follow the instructions of your doctor or respiratory therapist.



⚠ **Caution:**
Do not tilt the nebulizer kit at an angle of greater than 45 degrees in all directions. Medication may flow into the mouth or it may result in not nebulizing effectively.



9. Press the power switch to the on (|) position. As the compressor starts, nebulization begins and aerosol is generated.
   Inhale the medication.
10. When treatment is complete, turn the power off and unplug the compressor from the power outlet.

Cleaning and disinfecting

Cleaning

Clean the parts after each use to remove residual medication. This will avoid inefficient nebulization or infection.

■ Washable parts

- **Nebulizer Kit (Inhalation top, funnel, Medication tank), Mask, Mouthpiece**
  Wash them in warm water and mild detergent (neutral detergent). Rinse them thoroughly with clean hot tap water and allow to air dry in a clean place.

■ Non-washable parts

- **Compressor, Air Tube**
  Firstly, make sure that the power plug is unplugged from the power outlet. Wipe clean with a soft cloth moistened with water or mild detergent (neutral detergent).
- **Air Filter**
  Do not wash or clean the air filter. If the air filter becomes wet, replace it. Damp air filters can cause blockages.

Disinfecting

Always disinfect the parts after each treatment. If the parts are heavily stained, replace them with new ones.

Boiling

Disassemble the nebulizer kit by turning counterclockwise the top and remove the funnel. Dip nebulizer kit components and mouthpiece in boiling water for 15-20 minutes. Reassemble the nebulizer kit components and connect it to the air-outlet, switch the device on and let it work for 10-15 minutes.
The masks must be washed with warm water.
Do not boil the air tube and masks.

Disinfectant

Use cold disinfecting liquids following the manufacturer's instructions.

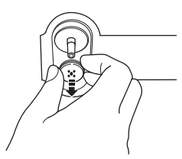
Removing condensation from the air tube

If there is moisture or liquid remaining in the air tube, be sure to follow the procedure below to remove any moisture from within the air tube.

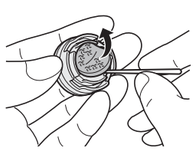
1) Make sure that the air tube is connected to the air connector on the compressor.
2) Remove the air tube from the nebulizer kit.
3) Turn on the compressor and pump air through the air tube to expel the moisture.

Changing the air filter

1. Pull the air filter cover off the compressor.



2. Change the air filter.
   Remove the old air filter with a sharp object and insert the new air filter.



3. Put the air filter cover back in place.
   Make sure it is attached properly.

Notes:
- Use only OMRON air filters designed for this device. Do not operate without a filter.
- Do not wash or clean the filter. If the air filter becomes wet, replace it. Damp air filters can cause blockages.
- There is no front or back orientation for the air filters.
- Check that air filters are clean and free of dust before inserting them.

Troubleshooting

Check the following if your unit should fail during operation.

Problem	Cause	Remedy
Nothing happens when the power switch is pressed.	Is the power plug plugged into a power outlet?	Check that the plug is inserted in a power outlet. Unplug then reinsert the plug if necessary.
No nebulization or low nebulization rate, when the power is on.	Is there medication in the medication tank?	Add the correct amount of medication to the medication tank.
	Is there too much/little medication in the medication tank?	
	Is the nebulizer kit assembled correctly?	Assemble the nebulizer kit correctly.
	Is the nozzle blocked?	Make sure that the nozzle is free of blockages.
	Is the nebulizer kit tilted at a sharp angle?	Make sure that the nebulizer kit is not tilted at an angle of more than 45 degrees.
	Is the air tube connected correctly?	Make sure that the air tube is correctly connected to the compressor and nebulizer kit.
	Is the air tube folded or damaged?	Make sure that the air tube is not twisted or bended.
	Is the air tube blocked?	Make sure that the air tube is free of blockages.
	Is the air filter dirty?	Replace the air filter with a new one.
The device is abnormally loud.	Is the air filter cover attached correctly?	Attach the air filter cover correctly.
The device is very hot.	Is the compressor covered?	Do not cover the compressor with any type of cover during use.

Note: If the suggested remedy does not solve the problem, do not try to repair the device - the device is not user serviceable and please contact an authorized OMRON representative for assistance.

Technical data

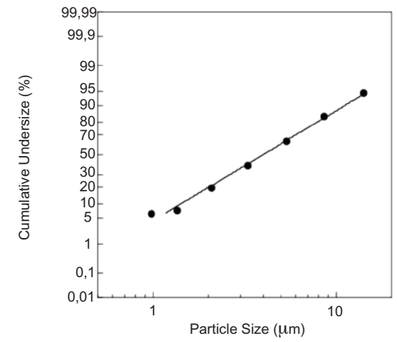
Name:	COMP AIR
Model:	NE-C25S
Type:	Compressor Nebulizer
Rating:	AC 230, 50Hz
Power Consumption:	75 W
Operating Temperature/ Humidity:	+10°C to +40°C / 30% to 85%RH
Storage and Transport Temperature/Humidity/ Air Pressure:	-20°C to +60°C / 10% to 95%RH / 700 - 1060hPa
Weight:	Approx. 1.5kg (compressor only)
Dimensions:	Approx. 158 (W) × 175 (D) ×100 (H) mm (compressor only)
Contents:	Compressor, Nebulizer Kit, Air Tube (180 cm), Mouthpiece, Child Mask, 5 pcs Spare Air Filters, Instruction Manual, Carrying Case.
Classification:	Class II equipment, Type BF applied part
IP Classification:	IP21

= Class II equipment
= Type BF applied part
Read the instruction manual carefully
= Power off
= Power on
CE 0123

Technical data for the OMRON NE-C25S Compressor with the Nebulizer Kit:

Particle Size MMAD:	4,21 µm MMAD = Mass Median Aerodynamic Diameter
Medication Tank Capacity:	6ml maximum
Appropriate Medication Quantities:	2ml minimum - 6ml maximum
Sound:	Approx. 55dB
Nebulization Rate:	Approx. 0.25ml/min (by weight loss)
Airflow/Compressor Output:	4L/min @110kPa
Aerosol Output:	0,243 ml
Aerosol Output Rate:	0,084 ml/min

Cumulative % particle mass of sodium fluoride under size



Notes:
- Subject to technical modification without prior notice.
- This OMRON product is produced under the strict quality system of OMRON HEALTHCARE Co., Ltd., Japan.
- The device may not work if the temperature and voltage conditions are different to those defined in the specifications.
- This device fulfils the provisions of the EC directive 93/42/EEC (Medical Device Directive) and the European Standard EN13544-1:2007+A1:2009, Respiratory therapy equipment - Part1: Nebulizing systems and their components.
- Performance may vary with drugs such as suspensions or high viscosity. See drug supplier’s data sheet for further details.